

## ABSTRACT

A system and method for automatically and accurately determining the exact location of a knife-edge, such as an edge of an optical shutter, so that it can be controlled

5 automatically. In one aspect the system comprises a mechanized shutter coupled to a shutter controller that can automatically control the shutter's location and movement.

According to one implementation of the shutter controller the system takes a first image at a first shutter position. The shutter is then moved a predetermined amount and a second image is taken. Then, the pixels of each image are added in the direction perpendicular to  
10 the movement of the shutter, so as to provide two one-dimension functions. A linear difference of the functions is then taken, so as to obtain a one-dimensional linear difference function. A peak in the linear difference function is then identified as the location of the shutter.